

SR 520 Bridge Replacement and HOV Project

Cost Estimate Validation Process (CEVP)

Updated Fall 2005

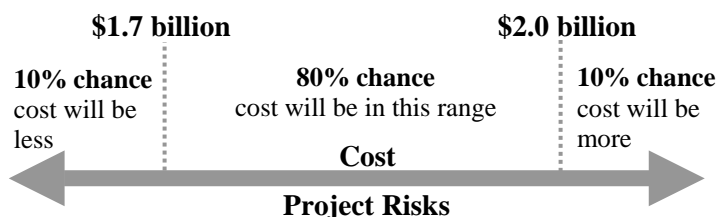
4-Lane Alternative 2 General Purpose Lanes in each direction



Project Description

- Rebuilds the existing four-lane freeway from I-5 in Seattle to Bellevue Way with 2 lanes in each direction and full width shoulders
- Rebuilds the Evergreen Point Bridge and the Portage Bay Bridge
- Rebuilds existing westbound HOV lane from 108th to the east end of the Evergreen Point Bridge
- Rebuilds outside lane transit stops at Montlake, Evergreen Pt. Road, & 92nd
- Adds HOV access onto the I-5 express lanes to downtown Seattle
- Adds bicycle/pedestrian path
- Adds electronic toll collection
- Includes pontoons sized to carry future High Capacity Transit

Project Cost Range*



*cost increases if risks occur

Project Benefits

- Reduces seismic and storm damage risks to the Evergreen Point and Portage Bay bridges
- Improves safety and reliability by adding full shoulders
- Maintains current highway capacity and serves 7% more people in 13% fewer vehicles during the peak evening travel time as compared to the No Build alternative
- Provides increased transit benefit with new SR 520 to I-5 express lanes connection and improved SR 520 transit stops
- Improves environmental quality by removing "ramps to nowhere" in Arboretum area, improving water quality by treating storm water, and reducing noise in communities by adding sound walls
- Creates new path for bicycles and pedestrians
- Accommodates future High Capacity Transit across Lake Washington

Project Risks

- Limited number of qualified and available contractors and changes in market conditions
- Changes in local street improvement requirements
- Uncertainties in: right-of-way costs, bridge structure costs, and geotechnical findings
- Cultural resources identified
- Legal challenges to the Environmental Impact Statement (EIS)
- Delays in construction permitting
- Delays in funding

Project Schedule

- Begin construction: 2009 to 2010
- New bridge open to traffic: 2013 to 2015
- End construction: 2015 to 2017

What's Changed Since 2004 CEVP

- **Scope:** No change
- **Schedule:** Design schedule assumes plans contract ready for Evergreen Point Bridge replacement in spring of 2008. Construction schedule assumes availability of full construction funding, completion of a new pontoon construction site, and construction on the Evergreen Point Bridge starting in 2009.
- **Cost:** Base project costs range from a decrease of \$29m to an increase of \$58m. Changes include opportunities for bridge construction efficiencies, increases in structure costs, and construction related mark-ups.

Key Financial Assumptions

- Project costs assume an unconstrained cash flow from the following sources: Nickel gas tax, TPA gas tax, a regional funding package, tolling, and other sources to be determined
- Design funding available by 7/05 and construction funding by 1/08
- Inflation escalation is to 2013, approximate midpoint of construction
- Year of Expenditure (YOE) is 2013
- Project cost range includes \$33 million in expenses to date

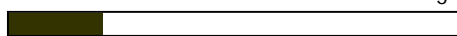
Level of

Project Design:

Low

Medium

High



Conducted
June 2005



Washington State
Department of Transportation

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Base 6-Lane Alternative

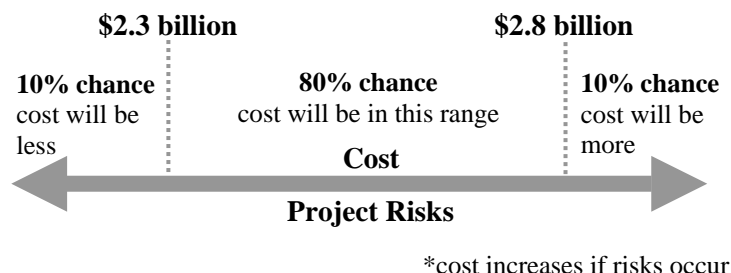
2 General Purpose Lanes and
1 HOV Lane in each direction



Project Description

- Rebuilds and expands SR 520 to six lanes between I-5 and Bellevue Way -- two general purpose lanes and one HOV lane in each direction, and full shoulders
- Rebuilds the Evergreen Point Bridge and the Portage Bay Bridge
- Inside HOV lanes and inside lane transit stops at Montlake, Evergreen Pt. Road, & 92nd
- Adds reversible HOV access onto the I-5 express lanes to and from downtown Seattle
- Adds bicycle/pedestrian path
- Includes five lidded sections of freeway (10th & Delmar, Montlake, Evergreen Pt. Rd, 84th, and 92nd)
- Adds electronic toll collection
- Includes pontoons sized to carry future High Capacity Transit

Project Cost Range*



Project Benefits

- Reduces seismic and storm damage risks to the Evergreen Point and Portage Bay bridges
- Improves safety and reliability by adding full shoulders
- Adds highway capacity and serves 25% more people in 3% more vehicles during the evening peak travel time as compared to the No Build alternative
- Improves travel time and reliability for HOV and transit by adding HOV lanes and completing the HOV system between Seattle and Redmond
- Provides HOV and transit benefit with new SR 520 to I-5 express lanes connection during morning and evenings
- Enhances community connections with freeway lids
- Improves environmental quality by removing "ramps to nowhere" in Arboretum area, improving water quality by treating storm water, and reducing noise in communities by adding sound walls
- Creates new path for bicycles and pedestrians
- Accommodates future High Capacity Transit across Lake Washington

Project Risks

- Limited number of qualified and available contractors and changes in market conditions
- Changes in local street improvement requirements
- Uncertainties in: lid design and aesthetic treatments, right-of-way costs, bridge structure costs, and geotechnical findings
- Cultural resources identified
- Legal challenges to the Environmental Impact Statement (EIS)
- Delays in construction permitting
- Delays in funding

Project Schedule

- Begin construction: 2009 to 2010
- New bridge open to traffic: 2013 to 2015
- End construction: 2015 to 2017

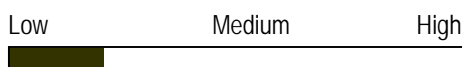
What's Changed Since 2004 CEVP

- Scope:** Added project Options on both east and west sides of the lake (6-Lane option cost estimates shown separately.)
- Schedule:** Design schedule assumes plans contract ready for Evergreen Point bridge replacement in spring of 2008. Construction schedule assumes availability of full construction funding, completion of a new pontoon construction site, and construction on the Evergreen Point Bridge starting in 2009.
- Cost:** Base project costs have been reduced by \$88m to \$238m. These reductions are attributed to accelerated schedule assumption, reduced risks, and new opportunities for bridge construction efficiencies. Project options will add or reduce costs depending on the option selected.

Key Financial Assumptions

- Project costs assume an unconstrained cash flow from the following sources; Nickel gas tax, TPA gas tax, a regional funding package, tolling, and other sources to be determined
- Design funding available by 7/05 and construction funding by 1/08
- Inflation escalation is to 2013, approximate midpoint of construction
- Year of Expenditure (YOE) is 2013
- Project cost range includes \$33 million in expenses to date

Level of
Project Design:



Conducted
June 2005



